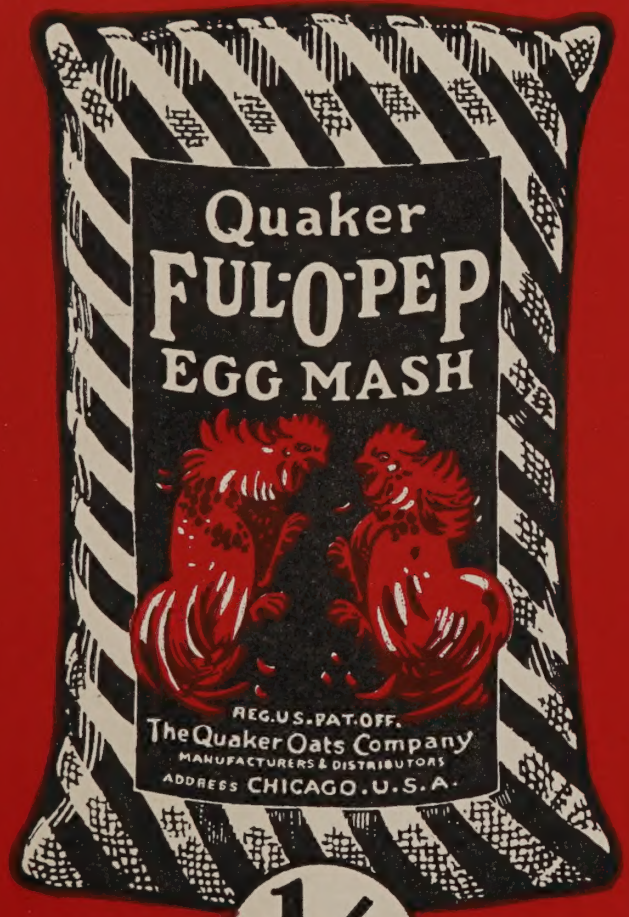
MAKE MONEY

-feed hens this common sense way

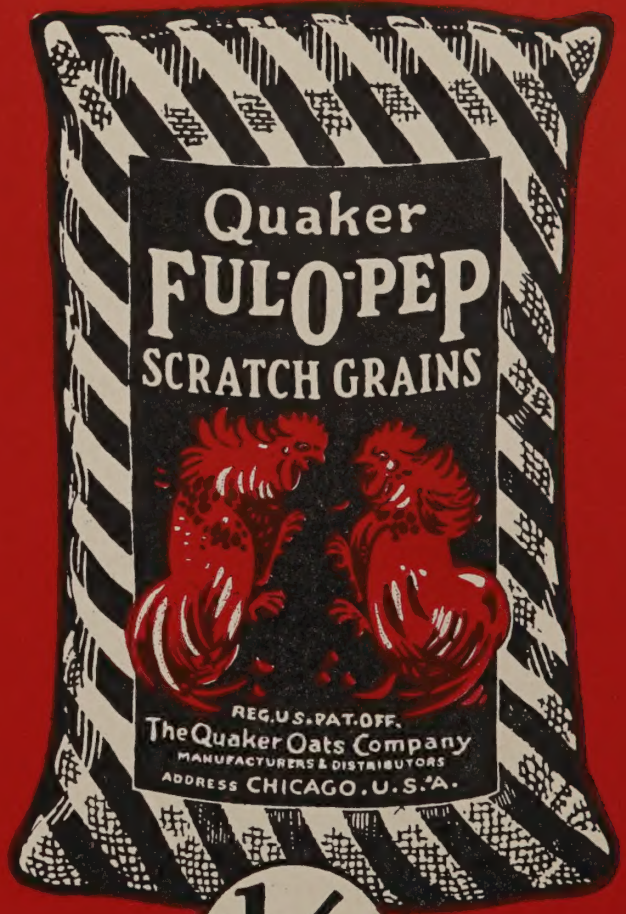
Published by **The Quaker Oats Company** *Chicago U.S.A.*

feed hens the FUL-O-PEP WAY



1/3

1/3



1/3

plus *plus*

for **LOW FEED COST** *and* **LOTS** *of* **EGGS**

Mr. W. C. Mullins, Handley, Texas, believes in trap nesting.

Make Money By Common Sense Feeding

DO you want to increase the egg production from your flock? Do you want to take care of your hens with less labor, and above all, do you want to increase your net profits? We are optimistic enough to believe that we can help you do all three.

Proper Feed Intake All Important

To realize the most from the flock, the birds must live and lay a fair number of eggs month after month throughout the year. It isn't profitable to have your hens lay 80 or 90 per cent one month and drop to 10 or 20 per cent the following month. Steady, continuous production requires proper nutrition. A feed that lacks one or more of the essential nutrients will produce uneven egg production.

The birds first eat to maintain themselves and whatever extra feed they consume is transformed into eggs. They must receive a balanced diet of the things needed to produce eggs and maintain proper body flesh. During cold weather they need extra feed to keep warm while in hot days they need to restrict their feed consumption so as not to become too fat or constipated.

Copyright 1937—The Quaker Oats Company

Some Well Developed Leghorns owned by Walter Chamberlain, Kirkwood, N. J.

When it comes to regulating their feed intake, we just have to count on the hen's help. As the saying goes, "You can lead a horse to water, but you can't make it drink." You can put feed in front of a hen, but unless it is in the form that appeals to her, she cannot or will not eat the way she should of many kinds of feed.

All-Mash Method Has Shortcomings

For instance, the all-mash method of feeding is utterly unadapted to extremely cold weather or to particularly hot weather. It is very difficult for a bird to eat mash without drinking water. In cold weather, the birds hate to drink a lot of water; so it is hard to get them to eat enough mash to provide the necessary heat and energy, plus the extra needed for making eggs. In extremely hot weather, the birds prefer drinking water for cooling purposes to drinking water for the purpose of washing down the mash. In either case it is bound to reduce feed consumption.

FUL-O-PEP CHEAPER THAN HOME-MIX: *Having finished our second full year on Ful-O-Pep Feeds, you may be interested to know that results are most satisfactory. The health of our birds has improved as indicated by a lower mortality and less culling. Production has been steadier. We also find that it costs less to feed Ful-O-Pep Feeds. This to one who has fed home mixed feeds for years is quite an interesting discovery. Walter Chamberlain, Kirkwood, N. J.*

The feeding system that we recommend and that thousands of poultry men are following is what might be called a half-way cafeteria system. We keep Ful-O-Pep Egg Mash and oats in separate hoppers in front of the birds all the time. We hand feed grain, morning and night, feeding most of the grain at night.

Cafeteria System Is Unsatisfactory

In our experience, the all-cafeteria system of hopper feeding scratch grain, as well as mash and oats, does not work out satisfactorily with many flocks. Some chickens, it seems, love their corn. If a hopper of corn is in front of them, they fill up on it and get so fat that they are only good for the butcher. Also with the all-cafeteria system, the birds are much more apt to get into trouble from both constipation and blowouts and pickouts.

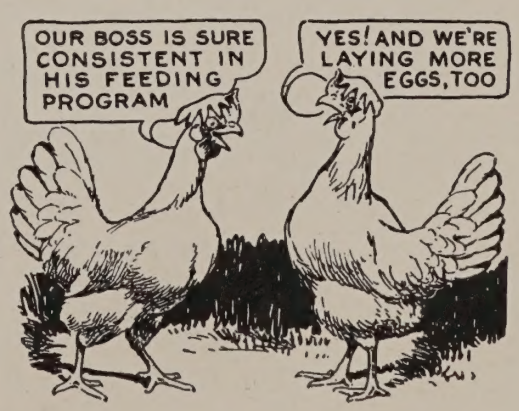
The Ful-O-Pep Feeding Program consists of feeding by weight, one-third Ful-O-Pep Egg Mash, one-third Oats and one-third Ful-O-Pep Scratch Grain. We find that when Ful-O-Pep Egg Mash and oats are kept before the hens in hoppers, they will eat about equal parts by weight. In cold weather in the north, it is desirable to feed a little extra scratch and, in turn, less scratch in hot weather in the south.

Oats Is Economical To Feed

It usually is much more economical to feed whole oats than it is to feed anything else. Regardless of cost, though, oats will keep the birds in better flesh, will go further in preventing feather picking, and will eliminate the necessity of wet mash feeding, thereby cutting down on labor costs in handling the flock.

Hens that are fed the Ful-O-Pep way are tighter feathered, better fleshed and, consequently, are better able to stand changes in weather than the soft, loosely feathered, heavy mash-fed birds.

The Ful-O-Pep Feeding Program will not work with every mash feed. We do not want you to think that we are recommending this feeding program regardless of the mash you may be feeding. The Ful-O-Pep Feeding Program has been planned to go with Ful-O-Pep Egg Mash. In order to maintain steady high production throughout the year on this feeding program, it is necessary that the mash be highly digestible, rich in vitamins and that a good part of the protein be derived from animal protein feeds.



Ful-O-Pep Will Go Further

We believe Ful-O-Pep Egg Mash is the most digestible mash on the market. It will really go further because of its liberal oatmeal content. Then, too, Ful-O-Pep Egg Mash is packed with nourishment. No expense has been spared in incorporating the necessary health giving, egg building ingredients consistent with quality.

The only supplements that are necessary with Ful-O-Pep Egg Mash, and with this feeding program, are grit, oyster shell, charcoal and water. The additions which many poultry men make in the way of supplements to their mash very greatly increase the cost if it were figured out on the basis of the price per bag or the cost per ton, to say nothing of all the extra work involved feeding these supplements.

We have tried feeding extra oil. We have tried feeding extra milk. We have tried feeding wet mash. All, to the best of our knowledge, to no avail, either from the standpoint of egg production, hatchability, or egg size. As a matter of fact, some of the supplements we tried increased the mortality and decidedly increased the cost.

Ful-O-Pep Produces Results

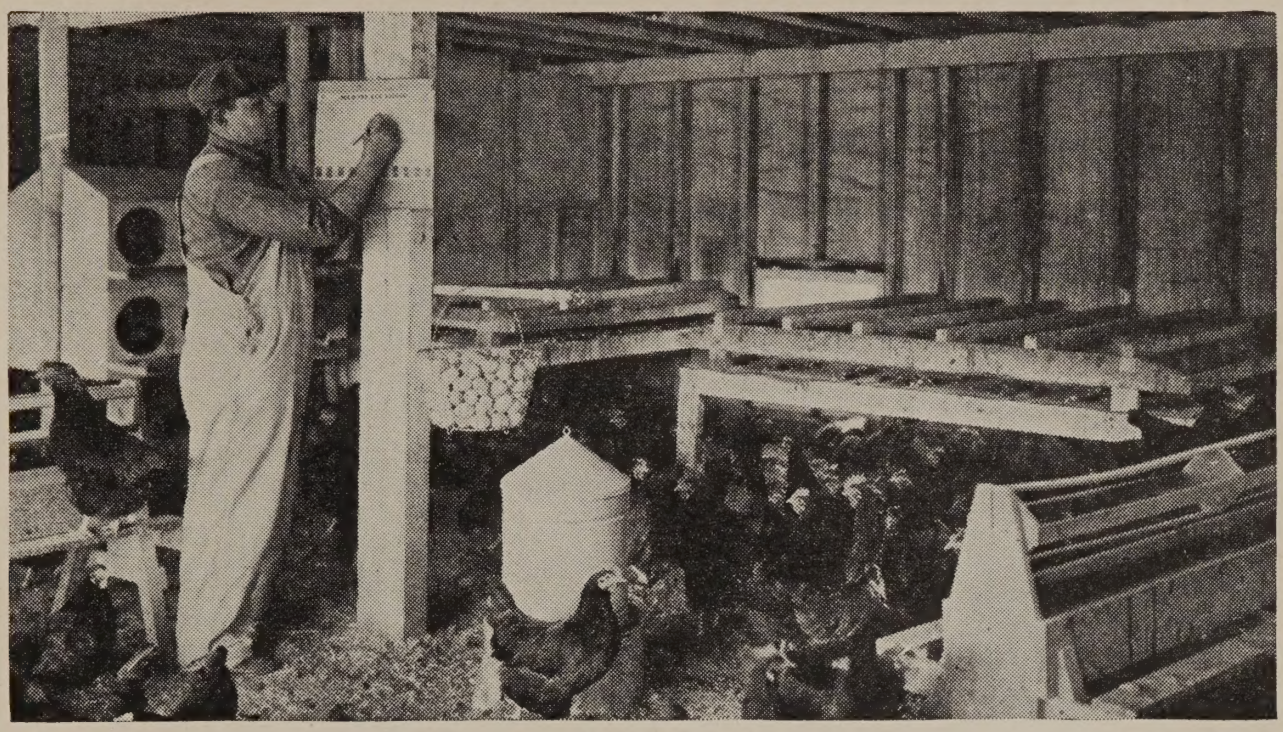
Poultrymen who have been feeding Ful-O-Pep Egg Mash according to the Ful-O-Pep Feeding Plan, know the exceptionally fine results that they have had in maintaining highly profitable production in the flock with minimum of mortality. High production, together with the low cost of heavy oat feeding, has made it possible for a good many poultrymen this past year to show a profit when heavy mash feeders were losing money with their flock.

Compare Feed Costs

If you are now feeding another ration, we urge you to compare the cost of your present feeding program with the average cost of Ful-O-Pep Egg Mash, Oats and Ful-O-Pep Scratch Grain, feeding them in equal parts. We believe that you will be surprised at how much it will lower your feeding costs, and we know that you will like the results obtained. Aside from producing eggs economically, you have in Ful-O-Pep Egg Mash a feed that will produce the finest quality of market eggs — the kind that command a premium.

We do hope that you will decide to use Ful-O-Pep Egg Mash and that you will follow the Ful-O-Pep Feeding Program this winter.

FINDS FUL-O-PEP SUPERIOR: *For three years I have used Ful-O-Pep exclusively and have had splendid results. I find that my flock of* 10,000 *pullets are vigorous, well developed, full feathered birds. I also operate a large battery broiler plant that Ful-O-Pep Feeds have helped make profitable. I am thoroughly convinced that Ful-O-Pep Feeds are superior to any feed I have ever used. W. C. Mullins, Handley, Texas.*



Laughlin Bros. of Altoona, Pa., have a Mighty Uniform Flock of Reds.

Housing Pullets

ONE of the most important jobs that you have is to move the pullets from the range into laying quarters without disturbing them. You can get a fine flock of pullets into more trouble and can do more in a few hours to ruin a whole season's careful work of rearing them by mishandling at this time.

Avoid Rough Handling

A common way of mishandling is to shut the birds up at night after they have been roosting out in the open and as a result sweat the entire lot. We don't know of any better way to take weight off birds and throw them out of condition than to put them in an overheated, poorly ventilated house.

Some poultrymen think that it is fun to see birds jump, fly, and yell as they are chased, caught, and shoved into crates. Handling pullets in this way leads to a good many internal injuries that do not show up then but later. They gradually fade away and die.

FUL-O-PEP PAYS EXTRA DIVIDENDS: *We raised* 1,800 *chicks last year according to the Ful-O-Pep Feeding Program with a very low mortality and carried* 900 *laying hens thru last winter. Our egg production was maintained at a high and uniform level. We feel that the Ful-O-Pep Way pays extra dividends. Laughlin Bros., Altoona, Pa.*

Make Sure The Pullets Are Eating

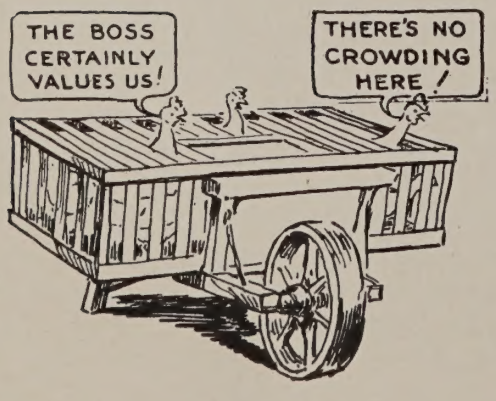
If there is ever a time that you want to cultivate the friendship and the good will of your pullets it is when they are first housed in winter quarters. Take several days if necessary in moving them. The ideal way to move pullets is to pick them up off the roost at night and carry them one or two at a time to the hen house. This, of course, may be impractical because of the distance between the range and the laying house. At any rate, avoid frightening the pullets as you move them and don't let them pile up in a corner or crowd them.

The more uniformily the pullets are graded as to size and development when moved to the winter quarters, the easier it is to manage them and in turn get uniform production. Leave the immature pullets out on range or house them separately. Pullets that are ready to come into production are naturally strong, vigorous and hungry and consequently drive the smaller, less aggressive birds from the feed hoppers.

As you move the pullets inside be sure that they get a square meal. Have the hoppers of the same type as those used on range. We've seen pullets walk around for several days without discovering the feed hoppers and not know enough to scratch in the litter for grain; consequently, lose a half a pound to a pound in weight the first two weeks in the laying house.

Heavy Egg Production Expected

If your pullets have been restricted in feed while on range and you put the mash and oat hoppers smack on the floor and help them find the grain by pushing the litter aside the first week, you will be amazed how quickly they will jump up into high production. We find pullets held back according to the Ful-O-Pep rearing program will oftentimes jump up to over 50% production two weeks after they are housed. This is, provided they are well matured pullets when they are moved to laying quarters.



Another problem to guard against when moving pullets is constipation. As long as you are feeding oats freely we do not believe you have to worry a lot about constipation.

Birds that have been getting a lot of green stuff, plus a lot of exercise, and are suddenly shut in are apt to become

Jack Woodward, Pinetta, Fla., Has Been Following The Ful-O-Pep Way.

constipated. Watch their droppings and make sure they are eating oats freely. If the droppings become small and hard, give the birds a molasses flush at the rate of a pint to 16 quarts of water. Give this as the sole drink for one full day.

As the pullets become accustomed to eating mash and adjust themselves to being confined, the likelihood of constipation will disappear. Actually getting the birds to scratch in the litter, and keeping them a little hungry the first few days will do a great deal to tone them up and keep them coming.

See That Pullets Go To Roost

Occasionally, we find poultrymen having some difficulty getting pullets to roost in the hen house. By putting up some ladders or hurdles for them to walk up on, you will help to eliminate this problem. If you will make a point to be in the house just as the pullets are going to roost and encourage them to walk up on ladders or hurdles for two or three evenings in succession, they will go to roost by themselves the rest of their lives.

WELL PLEASED WITH FUL-O-PEP: *I have been feeding Ful-O-Pep for some time and I am well pleased with the results. On a flock of* 400 *hens, fed the Ful-O-Pep Way, I have averaged better than eighty per cent production since the birds came into full production about six months ago. My mortality has been unusually low. Jack Woodward, Pinetta, Fla.*

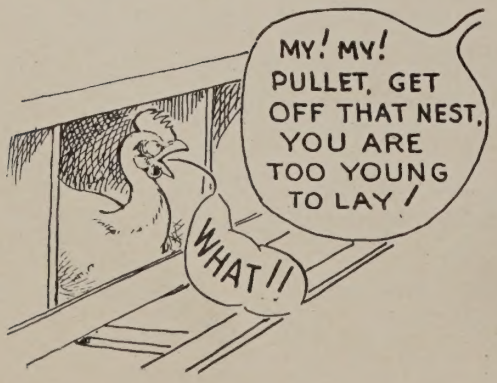
A Fine Flock of Layers owned by C. J. Smith, Burlington, Iowa.

Early Laying

ONE of the worst things a poultryman can do is to force his pullets into heavy production at an early age.

Early Maturity Detrimental

Many poultrymen confuse broiler raising with pullet rearing. When raising broilers, we try to hurry them to market as quickly as we can. We want them soft and tender and we don't particularly care if they will live much beyond the time that they are ready for market. With pullets, however, we want size, plus a strong sound bird that can take it for a year or more in the hen house. We want big pullets that can and will lay big eggs easily.



Pullets that are forced into production when they are three and a half to four months old will lay small eggs, the birds themselves are undersize and do not have the vigor or vitality to resist disease invasion. Furthermore, a bird that matures too quickly tends to have a short life.

Theodore Andrews, Wharton, N. J., owns this Fine Flock.

We commonly hear the statement from poultrymen that they cannot keep their pullets from laying. The trouble is that they just cannot stop feeding their chickens. If a pullet doesn't get enough to eat to grow, put on flesh, and lay, at the same time, she won't do all three. You can keep pullets from coming into production for a long time by just feeding enough to keep them growing and in fair flesh yet not enough to lay on.

Feed Pullets Lightly

One of the farms that had adopted our feeding program for several years was late one year in getting a new incubator and consequently the chicks were late. The poultryman pushed the late hatched chicks by heavy mash feeding and got them into laying between four and five months of age. An earlier hatched lot, which was held back by heavy oat feeding and restricted mash feeding, lived and laid well. The pullets that were pushed into early production, however,

FUL-O-PEP PRODUCES EGGS FOR LESS: *After feeding several well known commercial feeds I tried out Ful-O-Pep Egg Mash. This was three years ago. I find that I can produce eggs for less money. The oatmeal base seems to be just what the hens want to keep them in good condition. C. J. Smith, Burlington, Iowa.*

had the usual trouble from paralysis, blindness, big livers, tumors, etc., that so frequently comes from pushing them into early production.

Avoid Forcing Late Hatches

This farm had been free from these troubles for two years. Moreover, the trouble was restricted to the birds that were forced and not among the earlier hatched pullets that were raised in the same field.

If you didn't get your chicks until late in the spring, we would most strongly urge that you do not force them into early production merely to take advantage of high egg prices. We believe you will be money ahead if you will hold them back until they have fully developed. They will then lay big eggs instead of peewee eggs and will have the resistance to disease invasion and the ability to lay lots of big eggs for several years.

Feed Every Other Day on Range

The age at which pullets lay their first eggs is primarily governed by what and how much you feed them. It requires some judgment to restrict the feed so they do not lay and yet not starve the birds.

We have held pullets back for a month while they were running out on a good grass range by feeding them every other day. On the days we fed them they got a little Mash in the morning, oats all day, and Coarse Chick Feed at night. We did this for three weeks with no harmful effects. The birds picked up in production from about 1% to 10% between 5½ and 6½ months of age.

A good many farm-raised pullets get very little after they are running out on range. They are slow maturing but are big, strong, healthy birds that are capable of laying lots of big eggs.

Feed The Ful-O-Pep Way.

We are confident that if you will adopt the Ful-O-Pep Feeding Program, even though it is late summer, that you will markedly improve egg production and lower the mortality in your pullet flock during their first laying year. We urge you to give it a trial.

FINDS FUL-O-PEP ECONOMICAL: *For the past three years I have fed Ful-O-Pep Feeds and am well pleased with the results. Ful-O-Pep Feeds fed the Ful-O-Pep Way are both practical and economical and surely do develop large healthy pullets that give me heavy egg production with low mortality. Theo. Andrews, Wharton, N. J.*

This busy Hen House is on the Farm of E. T. Coon, Schenectady, N. Y.

Oats

DO you realize how much oats a chicken may eat in an hour and how quickly it can eat them? Last fall at an exhibit we put on a guessing contest as to how many grains of oats a cockerel would eat in an hour's time. The oats used were of medium size, and they were fed on cloth so the birds could eat them readily. We starved the birds for twenty-four hours before putting the oats in front of them.

A Bird Can Handle Lots of Oats

The first bird we tried was a Leghorn cockerel, weighing five pounds, that had been starved for twenty-four hours. He ate over 1700 grains of oats in an hour's time.

The second was another Leghorn cockerel that had been fully starved for twenty-four hours and half starved for forty-eight hours. He ate over 2800 grains of oats in an hour.

FINDS FUL-O-PEP SATISFACTORY: *We find Ful-O-Pep very satisfactory and are feeding it exclusively to our 3000 birds. Feeding a liberal amount of grain with Ful-O-Pep Mashes gives proper developed pullets, quick feathered broilers, high egg production, excellent hatchability and a low mortality from baby chicks to breeders. E. T. Coon, Schenectady, N. Y.*

Oats Insures Steady Feed Consumption

The third bird was a Rhode Island Red cockerel that weighed seven to eight pounds. He had been starved twenty-four hours. We put 2000 grains of oats in front of him to start with and he practically cleaned up the entire lot in ten minutes, without even bothering to take a drink. This cockerel ate 3153 grains of oats in an hour's time and was still eating when the hour was up.

Chickens can eat oats freely without drinking, but they cannot eat mash freely without drinking. By keeping a hopper of oats in front of your birds, you are sure of steady feed consumption regardless of temperature and weather conditions.

Proper Grit Important

There are two things we must remember in feeding oats. The first is the necessity of feeding as large a size granite grit as the birds will eat freely. Then they will not have any difficulty in grinding up the oats. We believe they should eat from four to six pounds of grit a year, or a third to a half pound a month.

The other thing to remember is to select a smooth, thin hulled, short awn oat. A small midwestern oat is probably the best for poultry feeding. As long as the birds are provided with good gizzards and the proper grit for grinding, they apparently can handle the small oats to real advantage as part of the ration.

Oats Puts The Pep In Ful-O-Pep

The oatmeal in Ful-O-Pep Mashes, plus the feeding of oats, is what puts the pep in Ful-O-Pep. There isn't any question but that the heavy feeding of oats, together with the feeding of Ful-O-Pep Egg Mash, will do a remarkable job of keeping your birds in maximum production and in top notch condition as far as flesh and health are concerned. While we do not recommend feeding only oats and mash, a number of poultrymen have obtained remarkable results by feeding 2/3 oats and 1/3 Ful-O-Pep Egg Mash.

We speak of a horse or a person as "feeling his oats today." If you will feed Ful-O-Pep Egg Mash and follow the Ful-O-Pep Feeding Program then your hens will have so much pep that they will really shell out the eggs.

12 YEARS ON FUL-O-PEP: *We have used Ful-O-Pep for the last 12 years. We raise about* 1,000 *chicks and carry about 600 layers. We have had exceptionally good success with Ful-O-Pep and like the new feeding program you suggest. Floyd F. Fillman, Port Washington, Ohio.*

Mrs. Fred Haberman, Blooming Prairie, Minn., can be Proud of this Flock.

Feed Hoppers

ONE of the most important factors in any feeding program is the type of hopper used. We believe the open hopper on the floor, with the ends toward the light, to be the most satisfactory. The birds can see the feed readily, there is no chance for injuring the comb, causing bleeding, there is less fighting, and it is much easier for the birds to get a drink after a mouthful or two of mash. Then, too, it prevents picking of vents since they are covered as the birds reach into the hopper.

Place Hopper On Floor

By having the hoppers on the floor you avoid blind spots in the pen. We find that it is very easy to scare the birds when you have blind spots, as you do with the table type of hopper which stands several feet off the hen house floor.

The reason for putting hoppers with the ends towards the light is to avoid litter being kicked into them. A hen always keeps her head toward the light when scratching, and by having the hoppers crosswise in the pens they would soon be filled with litter.

These Fine Leghorns owned by Walter Swanson, Elmhurst, Ill.

Feeding for Production

A GOOD hen deserves good feed, good housing, and good care in every way. If you expect your hens to lay lots of big, sound shelled eggs, you must give them access to the very things that eggs are made of, and the things that are so necessary to supply all parts of their body so as to keep them healthy and vigorous.

Ful-O-Pep Will Increase Your Profits

Many successful poultrymen are confident that Ful-O-Pep Egg Mash is the best, most economical ration that has ever been put on the market. Many of them as you will note from the testimonials in this book, have used Ful-O-Pep Egg Mash year after year with exceptionally fine results. We believe it will greatly increase your profits through better health, higher egg production, better egg shells, smaller egg loss, better hatches and better chicks.

The Ful-O-Pep Way of feeding hens is extremely simple. Just a light feeding of Ful-O-Pep Scratch in the morning and all the Ful-O-Pep Scratch they will clean up at night, plus a hopper of oats and a hopper of Ful-O-Pep Egg Mash in

front of the hens all the time. Grit, charcoal and shell building material should be hopper fed and fresh water should always be available.

Feed Hens Mash, Oats and Scratch

The relative amounts of Ful-O-Pep Egg Mash, Ful-O-Pep Scratch Grains, and oats to be fed will vary slightly with the different seasons of the year, and with different parts of the country. In the winter, when nights are long and cold, hens need more of the heat-forming, energy-producing grain. On the other hand, when the nights are short and warm, the hens need very little heat or energy-producing feed, in other words scratch grains.

Consequently, it is necessary in the winter where it gets cold to feed more scratch grains in comparison to whole oats and mash. In the summer or in the South, it is quite possible to feed relatively little grain and considerably more mash and oats. Actually, we figure that you will feed roughly one-third Ful-O-Pep Egg Mash, one-third Ful-O-Pep Scratch Grains, and one-third whole oats.

Regulate The Grain Feeding

The amount of oats and the amount of mash can be regulated by the amount of grain that is fed. If so much scratch is fed that some is left over in the litter all thru the day, the birds will eat relatively large quantities of scratch and relatively little Ful-O-Pep Egg Mash or oats. Ful-O-Pep Egg Mash is amply rich in vitamins and proteins to give the best results on the basis of one-third Egg Mash, one-third oats, and one-third Scratch Grains.

Provide Enough Hoppers

An essential part of feeding is to supply plenty of hopper space so that all the hens can eat Ful-O-Pep Egg Mash freely. To provide the right feeding conditions for your hens, you must supply three or more running feet of open hopper space to each ten birds. If you restrict the hopper space, the weaker or less ambitious birds will not get a chance to

FUL-O-PEP PRODUCES GOOD HATCHES: *I am very well pleased with Ful-O-Pep Mashes and the Ful-O-Pep Way of feeding whole oats in separate hoppers. The Egg Mash makes them lay and the oats seems to keep up their body weight. This year our birds laid from 58% to 70% all through the winter. The fertility and hatchability of our eggs has been excellent even though the birds were laying heavily. Walter Swanson, Elmhurst, Ill.*

eat as much mash or oats as they should and you will not obtain good production from the entire flock.

Keep Water Available

Chickens like fresh water. When you have an ample supply available and the climate is not too cold, supply running water. Fresh, running water requires less labor and insures birds an ample supply at all times. It tastes better and the birds drink more freely. Just because hens will drink out of a dirty pool of water, don't make your birds drink that kind of water.

During the cold weather, some type of heating device should be used if running water is not provided. A heating device will save enough pails and labor to pay most of the cost of heating. It will also materially help in keeping up uniform egg production. There are thermostatic controlled water heaters that keep the cost of heating to a minimum and maintain the water supply at an even temperature. A hen should have by weight one and a half to two times as much water as feed. Water is the cheapest food nutrient that you supply your hens.

Hens Need Grit

Grit should always be available in hoppers. Also, put granite grit in the mash hoppers when refilling with mash so as to insure the birds' having a supply available. The grit should be clean and bright so that the birds will eat it readily. A gray granite with black specks of mica is the best type of grit that we have found. Many kinds of grit, birds will not eat. Just having a hopper of grit in the house, regardless of whether the hens eat it or not, is not sufficient. After all the grit will cost you very little and may save you many dollars in feed.

A proper supply of grit materially helps increase the digestion of grain. It makes possible the economical, heavy grain feeding program that we are recommending. You cannot expect your birds to handle the amount of oats and grain recommended in the Ful-O-Pep Program, and keep in first class condition, if you do not keep your birds amply supplied with the type of grit that they desire.

J. Gillis, Watertown, Conn., owns this Two Story Hen House.

Oyster shells are necessary for the formation of egg shells. If the hoppers are filled with fine shell dust, the birds will not eat them freely. It may result in weak egg shells and fewer eggs. Be sure to keep clean, coarse, bright shells before the birds.

If the hens consume too much oyster shell, it may interfere with the egg production and with the hatching quality, just as a lack of shells may injure the birds. Watch your hens to see that they do not consume much over a quarter of a pound of shells per hen per month. If the birds are consuming too much shells, it may mean that you are not giving them a grit that they like to eat so are eating shells for grinding purposes as well as a source of lime for egg shells.

Avoid Over-feeding of Shell

Ful-O-Pep Egg Mash carries all the supplements that we know that the birds need. We do not recommend feeding extra oil, or other animal protein material, or a wet mash, or for that matter anything else that requires extra expense or extra labor.

5 YEARS ON FUL-O-PEP: *Over five years ago when I only had a few hens I started using Ful-O-Pep Feeds. Last fall I housed around* 1,000 *pullets that were raised on Ful-O-Pep Feeds. They laid well this winter — close to* 70%. *I used Ful-O-Pep Egg Mash, plenty of scratch grains and hopper fed small oats. There was no picking and I had no trouble keeping the pullets up in weight. J. Gillis, Watertown, Conn.*

Ful-O-Pep Lowers Feed Cost

We are confident that Ful-O-Pep Egg Mash and the Ful-O-Pep Feeding Program will give you more uniform production, better health in your birds, better flesh, better quality of eggs, and a distinctly lower feed cost plus requiring less labor to care for the flock.

When it is possible, let the birds outdoors on a grass range. It is best though not to let the birds out on range until three or four o'clock in the afternoon. That will keep the eggs clean in wet weather, and also insures against the birds' laying dark yolked eggs that are objectionable on many markets. Having the birds shut up until late afternoon, keeps them near the hoppers eating so that they can keep up in egg production. We find that letting the birds outdoors all day usually results in a lowering of 5 to 10 percent in egg production and will affect the taste of the eggs and the color of the yolks.

Earth Supplies Something

Hens that can get outdoors in actual contact with the ground, we find are tighter feathered, have redder combs, and are apparently healthier than if kept confined. There is no doubt that the nourishment which they obtain from green stuff plus the dirt and the bugs that they eat does keep them in better health and in better condition.

When range is not available and fresh, green stuff can be supplied, we would suggest that it be fed freely, especially during the summer. Actually, we are not able to show any difference in production when green stuff is fed but we believe that it is better for the birds.

Chickens Select Feed By Sight

In changing from another mash to Ful-O-Pep Egg Mash, make the change gradually. Feed one-fourth Ful-O-Pep Egg Mash the first week, one-half the second week, three-fourths the third week, and all Ful-O-Pep Egg Mash the fourth week. Chickens judge their feed by sight rather than by taste. The reason for being so careful in changing feed is to get the birds accustomed to the difference in the appearance of the new feed. If the two feeds look alike and are of the same texture, it is quite possible to change immediately.

Ful-O-Pep Egg Mash is not a forcing short-time mash. It should be fed for several months to appreciate its body-building, health-promoting, egg-producing qualities. Feed it according to directions. Your hens will lay more eggs, larger eggs, better hatching eggs, and eggs with sounder shells. An actual test will prove to you the real economy in feeding the Ful-O-Pep Way.

Harold G. Windle, Cochranville, Pa., is a Breeder of Barred Rocks.

Wet Mash Feeding

FOR years poultrymen have fed a wet mash. For years we have felt that it was necessary to recommend a wet mash with the Ful-O-Pep Plan of Feeding. After our experience with hopper feeding of oats with Ful-O-Pep Egg Mash, we have found that there is nothing to be gained in feeding a wet mash.

Oats, Replaces Wet Mash

The oats supplies all the advantages of the wet mash feeding, without the dangers. It should be a small cereal oats with a thin hull so that the birds can readily handle it. Wet mash feeding distinctly increases the amount of labor because you must be regular about it. You are apt to overfeed it and get the birds off feed. You are apt to physic the birds. You are apt to feed too much so that it gets sour or moldy in the hoppers. This quite commonly also results in the dirty behinds found on many flocks of chickens.

Poultrymen have simply used wet mash feeding as a crutch to get the chickens to eat when they did not know how to get them to do it otherwise. With Ful-O-Pep Egg Mash, oats, and Ful-O-Pep Scratch Grains, this crutch is no longer necessary.

Shell and Grit

FOR many years poultrymen have been under the impression that there was no limit to the amount of oyster shells it was desirable for birds to eat. They had the feeling that if a little was good more would be better and proceeded to incorporate calcium carbonate or limestone freely into their rations.

Avoid Excess Calcium

Recent experimental work of the Poultry Department at Cornell and by the U. S. Department of Agriculture at Beltsville indicates that an excess of calcium is just as detrimental as a shortage of calcium.

Hens that are eating too much oyster shells will not lay as well, their eggs do not hatch as well, and they are not as healthy. The work of these experiment stations shows that the birds should consume approximately 2% in the form of calcium of the total ration. This includes the calcium derived from bone meal, milk, fish, and the like. Roughly speaking, a bird should eat ¼ to ½ a pound of oyster shells per month.

Feed A Granite Grit

Birds that fail to get grit for grinding will eat more shell to offset the deficiency. Limestone grit also increases the lime intake. Furthermore limestone grit does not serve as grit in the chickens gizzard since it is soluble in even a weak acid.

There are a number of different kinds of grit. Some grit chickens will not eat, at least we have known poultrymen to say a sack lasted them a year for 1,000 hens. Where grit is kept in open hoppers or sprinkled over the mash and is a light gray color with specks of mica we find the birds will eat ⅓ to ½ pound a month.

Free feeding of proper grit will largely eliminate croppy birds and pay for itself several times over by the saving of feed. Theoretically, it is possible to run a chicken farm without any grit, but no poultryman can afford to do so. For the sake of the health of your hens, which directly affects egg production and hatchability, plus the saving in feed bills, be sure the birds are adequately supplied with a good grit, such as granite grit.

Ful-O-Pep for Breeders

FUL-O-PEP Egg Mash is the best breeder mash that we know how to build. As far as we know, it contains all of the essential vitamins, proteins, and other necessary food nutrients required in the production of high quality hatching eggs.

Ful-O-Pep Contains All Essentials

You will find Ful-O-Pep Egg Mash carrying a liberal quantity of vitamins A, B, D, E, and the various factors of G. Careful thought was given to each of them in formulating the mash so as to insure good production and good hatchibility in the flock.

If we were to use only vegetable protein feeds and corn as the base of our mash, it would not make a top-grade breeder mash and laying mash at the same time. Ful-O-Pep Egg Mash, however, is built around oatmeal and contains a variety of animal protein feeds, including milk, fish and meat scraps. Oats has always been recognized as an outstanding feed for breeding animals of all kinds. In addition to the oatmeal in Ful-O-Pep Egg Mash we recommend hopper feeding of whole oats which helps insure even better health and condition in the flock. Eggs from such birds will naturally hatch much better.

Ful-O-Pep Insures Good Hatches

We could make a forcing mash that would give you heavier egg production over a short period of time than you will get on Ful-O-Pep Egg Mash. It would, however, mean a heavier mortality and in turn poor quality hatching eggs. In our estimation the poultry business is a year around business and your success depends upon maintaining good health and condition of the birds together with producing the finest quality market eggs, which also will hatch well.

If you will watch your incubator and maintain the proper moisture and a uniform temperature in all parts of the machine, we are confident that you will find Ful-O-Pep Egg Mash fed the Ful-O-Pep Way an outstanding Breeder Mash. It has proved so to just hundreds of poultrymen that have fed it as a Laying and Breeder Mash.

FUL-O-PEP CUTS FEED BILL: *We have fed the Ful-O-Pep Way this past winter. Hopper feeding of oats has cut our laying mash bill in half and also reduced the mortality. Ful-O-Pep Egg Mash keeps our birds in fine condition. Our hatches have been very satisfactory and the chicks of excellent quality. Mrs. Harold G. Windle, Cochranville, Pa.*

A Well Grown Bunch of Broilers Raised by Harry L. Daisey, Frankford, Del.

Broilers

THE Ful-O-Pep program for raising broilers is just about as nearly opposite the program for raising pullets as it can be. We want to grow broilers just as rapidly as possible, have them big, have them soft and tender, and have them ready to go to market by the time they are 10 to 12 weeks old. We are not raising them to live for two or three years.

Ful-O-Pep Produces Fine Broilers

Instead of restricting feed and feeding lots of grain, we recommend feeding primarily Ful-O-Pep Broiler Mash all the way through. Ful-O-Pep Broiler Mash is a fairly high protein feed and contains the things that will produce good flesh, exceptional feathering, good colored shanks, and puts on weight in a hurry. Ful-O-Pep Broiler Mash will do an exceptional job from beginning to end.

FUL-O-PEP GIVES DESIRED RESULTS: *After trying most of the commercial Broiler Mashes and local mixes your dealer, W. G. Williams Company, induced me to give Ful-O-Pep Broiler Mash a trial. My capacity is 12,000 broilers, and I raise two lots a year. Ful-O-Pep Broiler Mash is everything it is said to be. With my last lot of broilers I fed approximately one third grain and it was the finest lot of birds I have ever raised. They were tightly feathered and had excellent color in the shank and head. Harry L. Daisey, Frankford, Del.*

A Fine Flock of White Wyandottes owned by Mrs. E. G. Arnold, Mexico, Mo.

Aside from the Broiler Mash, feed a little Ful-O-Pep Fine Chick Feed, some fine granite grit and charcoal so as to avoid a tendency towards constipation and to keep the feathering fairly tight. We find that the tighter feather birds are sounder and less apt to get into trouble.

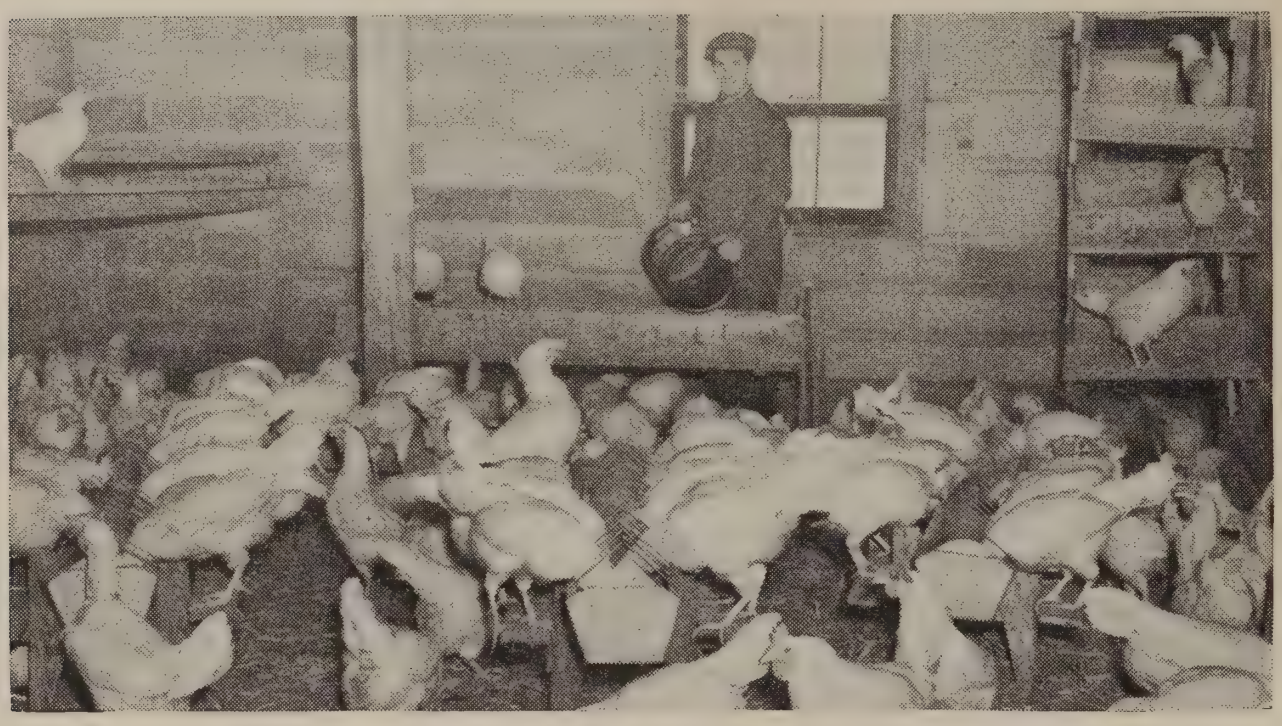
Be sure to watch the temperatures closely. Keep the chicks just as cool as you can without chilling them. Birds that are in a cool house eat much more freely, feather much better, and put on flesh a great deal faster. Too high brooding temperatures no doubt has been one of the main reasons for losses and for poor fleshing.

Feed Cracked Corn

When the birds are about four weeks old begin feeding medium cracked corn once a day. We think that cracked corn is better than coarse chick feed if you want to put a yellow shank on the birds. Keep Ful-O-Pep Broiler Mash in front of the birds and increase the hopper space as needed. At three weeks change the size of grit to medium and at six weeks to hen size.

Ful-O-Pep Broiler Mash with its Oatmeal base produces remarkably fine flavored broilers with exceptional breast development. They commonly command a premium on the market.

If interested in commercial broiler raising, be sure to send for our special folder on broiler production.



This Flock is owned by Floyd F. Fillman, Port Washington, Ohio.

Worms

IT apparently is possible to clean a flock of tapeworms simply by feeding. We know that improper feeding tends to bring on worms and proper feeding keeps them out. We believe it is possible to get worms to desert pullets by starving.

Before treating your birds for worms, make sure they are wormy. A flock that is wormy will usually have a number of birds with purplish combs, light in weight, and individuals that seem to have difficulty in picking up their feet.

Post A Bird In Good Flesh

In selecting a bird to post, be sure to pick one that is in fair flesh and looks reasonably healthy. Tapeworms will desert a sinking ship; consequently they might no longer be found in individuals that are thin in flesh and way out of condition.

In posting, cut the bird open and slit the intestines from one end to the other. If infested with large tapes or round worms, they will be in evidence. To look for the small, so-called microscopic tapeworm, take a section of the intestine directly in back of the gizzard and wash in a dish of water. If the bird is infested with small tapes, they will be quite evident as fine threads when the section is suspended in a glass of clean water.

Probably the best way to look for tapes is to examine fresh droppings while they are still steaming and moist. When the tapeworm is mature, segments of the worm which are loaded with eggs drop off and pass out with the droppings as small chunks of jelly-like, whitish masses. These move around and crawl to the surface where they roll up into a ball about the size of a pinhead, and as the dropping becomes firm they roll off onto the ground.

Examine Fresh Droppings

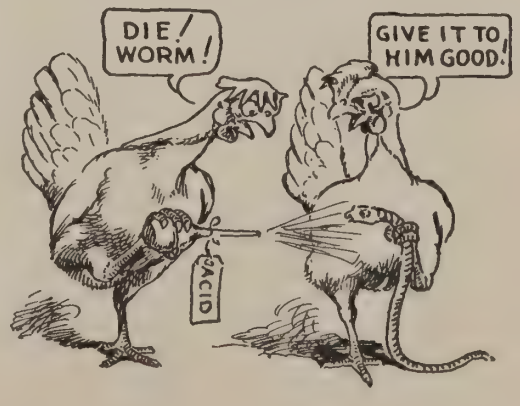
You really should examine a hundred or more fresh droppings before deciding whether tapes are prevalent in the flock or not. If you find tapeworm segments at the rate of one out of every five or six droppings examined, the birds are quite badly infested. If you find only one or two segments out of several hundred droppings examined, they are not the least bit serious.

The treatment for tapes from a feeding standpoint consists of getting the intestines as acid as possible. This may be accomplished, first, by feeding only oats, and second, by starvation, while the pullets are still out on range. The gastric juice of a chicken flows continuously whether food is present or not. The gastric juice is quite acid and apparently strong enough to drive out the tapeworms when on this feeding program.

Increase The Acid In Intestines

A number of poultrymen reported to us this past year that by keeping a hopper of pulverized oats in front of their birds, plus hand feeding whole oats at night, for a month, while the birds were still out on range, they cleaned up the tapes pretty well — not 100% — but so that they were able to obtain good production and a low mortality. If you have been troubled with tapes try feeding oats as outlined to the young stock before moving them off range.

We do not know of any drug that is effective in removing tapes. Some may get a good many segments but the head which remains embedded in the intestinal wall will quickly grow into a new worm.



The above feeding program also seems to be beneficial for the handling of round worms, although tobacco dust or nicotine sulphate capsules are very effective in expelling the large intestinal round worm.

A Pen of White Leghorns at Millers Poultry Farm, Glasgow, Pa.

Poultry Troubles

MOST poultry troubles are easily preventable or can readily be checked by proper care and management. Disease and vices among birds are generally brought about by unfavorable surroundings. It seems though, that we have to see them come and go two or three times before we are confident that the way the birds were handled and cared for was really the factor that eliminated the trouble.

Pickouts

Oftentimes feather picking, which leads to pickouts later, is due to improper brooding. Chicks that are raised on wire — that are kept inside too long — that are too crowded and too hot frequently begin tail picking, and the vice again appears when they are housed as mature pullets, especially if they are over-fed and crowded.

LOW MORTALITY ON FUL-O-PEP: *We have been feeding Ful-O-Pep Feeds for the past eight years and there can be no doubt that they have contributed much to our success and profits. We carried* 1700 *layers through last winter on Ful-O-Pep Egg Mash with a very low mortality and a splendid egg production without molting. Our experience leads us to recommend Ful-O-Pep Feeds to all our chick customers. Millers Poultry Farm, Glasgow, Pa.*

Another cause for pickouts among pullets may come from feeding too much corn and too little fibre, so that they try to make the the deficiency by eating feathers. If you raise your pullets on the Ful-O-Pep Feeding Program and are now keeping a hopper of oats in front of the birds and feeding them scratch in the litter, we do not believe you will have trouble with pickouts.

To stop pickouts darken the front of your nests so the birds will lay their eggs in the dark. Then make sure to have your mash in hoppers on the floor. Since idleness encourages vices, keep the birds busy scratching for grain in fairly deep litter. Watch feed consumption. They should consume at least one-third whole oats of their total ration. If need be, restrict the grain and mash to make them eat the oats. Last but not least, be sure to provide hen size granite grit and see that the birds are eating freely of it. When these simple things are done the problem of pickouts should not be serious on your poultry farm.

Blowouts

We usually find a large per cent of blowouts among pullets that receive excessive amounts of corn during the growing period. This results in too much abdominal fat which interferes with the laying of a good size egg, especially if the birds are constipated. As a result the oviduct is pushed out with the egg.

The first thing to do is to give the birds a molasses flush, using blackstrap molasses at the rate of one pint to 16 quarts of water. This will relieve the constipated condition. If still feeding fairly heavy on corn replace a good part of it with oats. The oats puts the flesh on the breast, while corn puts it in the abdomen.

Egg Eating

Occasionally we find some one having trouble with his birds eating eggs. This can immediately be stopped by putting some strips or shredded sheets of newspapers in the pens for the birds to eat; then be sure to correct your feeding program. When grit and shell are properly supplied and the Ful-O-Pep Feeding Program is followed, you rarely will have trouble with egg eating.

Pullets Going Light

This is usually one of the symptoms before birds die. With pullets, it may be traced to rough handling. Some one gets in a hurry and becomes careless as he goes through the pen, thus scaring the birds. It is hard to estimate just how much harm may be done in this way. Pullets that are already laying or ready to lay require even more careful handling than those that are not quite so far along in development. One should be extremely careful to keep them quiet and contended.

Pullets that grow light become listless, their face and comb turn slightly purple, and upon cutting them open you will find usually a tumor on the ovary, or oviduct, or indications of internal injury.

Blindness, Paralysis and Big Livers

These are still the principal causes for mortality on many poultry farms. If the birds were improperly raised, there is very little one can do about it. These troubles seem to appear primarily in flocks that are raised in a hurry by heavy mash feeding plus excessive amounts of lime or calcium carbonate. Such pullets usually come into laying when they are from four to four-half months old and begin to break down badly when they are six or seven months old.

After pullets are in heavy production and paralysis shows up there is little you can do except to cull closely and keep on culling. Pullets that have not begun to lay, we suggest you try the starvation program for at least a month. Give them a moderate feeding each day, of pulverized or ground oats, and a light feeding of whole oats at night. That is about all the birds will need in the way of feed while running on a good grass range.

Hold the pullets back, if possible, until they are six to seven months old and give them a chance to regrow their intestines and eliminate internal parasites. We would not say this treatment is effective in all cases, but it has helped a good many poultrymen who have tried it.

HAS FED FUL-O-PEP 5 YEARS: *My present stock of Whiting Wyandottes was started on Ful-O-Pep Chick Starter, following your regular feeding program. The development was most excellent. The fact that I have fed Ful-O-Pep Egg Mash to my hens continually for the past five years without interruption should be conclusive evidence that I believe it is the best that I can buy. Mrs. E. G. Arnold, Mexico, Missouri.*

Whitehorn Poultry Farm, Memphis, Tenn., feeds the Ful-O-Pep Way.

Lice and Mites

Birds that become the hosts of either lice or mites are seriously handicapped in egg production, and may become quite light in weight.

Before pullets are moved into the hen house it should be thoroughly cleaned and the roosts and nests painted with carbolineum. The little red mite, which is the most troublesome lives in the cracks and crevices in the daytime, and the birds become their hosts at night. Allow the carbolineum to dry before putting birds in the house, as it may prove injurious plus discoloring the plumage. One treatment a year should be all that you need give.

There are several treatments for lice that are effective. The one possibly most constantly used today is to paint the roost with Black Leaf Forty just before the birds go to roost. This will kill the lice, but not the nits, so you have to repeat the treatment within a week to ten days. The birds may also be dusted with sodium fluoride or some good louse powder.

FOR FUL-O-PEP 100%: *For the past three years my* 500 *hens have had nothing but Ful-O-Pep with the best results and I am for Ful-O-Pep* 100%. *I believe it takes a heavy oatmeal base feed for high percentage in egg production. W. O. Whitehorn, Memphis, Tenn.*

The Ful-O-Pep Experimental Farm

Aeroplane View of Farm

SINCE feed and the feeding method plays such an important part in your net profits from the flock, we considered it our job years ago to maintain a poultry farm where Ful-O-Pep Feeds and different ideas in nutrition might be tried under actual farm conditions. We are constantly seeking ways to improve Ful-O-Pep Feeds so that you will get more eggs from the flock, will obtain better hatchability, lower mortality of both hens and chickens and at the same time cut your feeding cost considerably. We feel confident that the Ful-O-Pep Way of Feeding is the most profitable for any poultryman to follow today.

You are cordially invited to visit the farm whenever you are in the vicinity of Libertyville, Illinois.

FORM O-9-37

PRINTED IN U.S.A.